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REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. The Examiner rejected claims 1-25 under 35 U.S.C. 102(a) as being anticipated by Alft. This rejection is respectfully traversed.

Independent claims 1 and 12

"creating a control point from each desired curve section..."

Although Alft discloses use of control points, Alft's control points are not associated with a curve section. Specifically, the control points of Alft are used to incrementally lead a number of straight line segments across what can be visualized as a virtual arc. (Col. 15:39-45.) However, the virtual arc of Alft is not actually used in mapping the borehole trajectory. Instead, the Alft reference is based on mapping using a number of straight line segments mapped from a first target to a second target. (Col. 15:21-25, col. 15:53-63 and Figure 29.) This point is borne out on Alft figures 16, 19, 23, 24, and 27, all showing multiple straight-line segments having no curves. The arc shown in figure 29 is only shown to illustrate that the effect of the number of straight-line increments can be visualized as proceeding across an arced path. There is no disclosure in Alft describing curve calculations such as radius or diameter dimensions. Instead, Alft discusses calculating angles between a present position and a subsequent target. (Col. 15:21-25.) Thus, because Alft uses a series of straight-line/angle directional coordinate, Alft does not disclose Applicants' claimed curved section having an associated control point.

A corollary to this position is that the control points of Alft, shown in figure 29, are not similar to Applicants' control points. Specifically, Alft uses its control points as temporary target points which allow computation of a straight line between the existing position and the temporary target point (Alft's control point). (Col. 15:65 -- col. 16:2.) Alft then incrementally moves the temporary target point (Alft's control point) closer to the actual target point. This is repeated until the temporary target point (Alft's control point) is incrementally moved past the actual target, at which time the it is pulled back so as not to pass the actual target. (Col. 15:35-52.) As discussed above, Applicants' control points are

associated with curved wellbore sections. Thus, because Alft uses its control points as destination points not as control points associated with a curve section, Alft can be distinguished.

"identifying tangent points...where the hold sections contact a curve section..."

Here again, although Alft's figure 29 illustrates an arc, this arc is used only to visually represent the path of the multiple straight-line segments. There is no discussion anywhere in Alft of tangent points used in borehole planning, much less Applicants' claimed use of tangent points that occur where its claimed hold and curved sections meet.

"graphically manipulating...the well bore trajectory...by directional movement of points..."

This point illustrates a primary difference between Applicants' invention and the Alft reference. Specifically, the Alft reference requires an operator to enter data associated with various target points along an anticipated trajectory. (Col. 11: 31-42.) The software then takes this data and plots a bore hole path comprising multiple straight-line segments from target to target. (Col. 11:42-44.) If a target location is changed, the software then must calculate a new borehole path and recreate a display of the new path. (Col. 11:44-49.) Thus, although Alft allows manipulation of a target location, Alft does not allow manipulation of the well bore trajectory itself, much less through the movement of control and tangent points.

Independent claim 18

"a control point...to enable simultaneous manipulation of said hold and curve sections..."

As discussed above, Alft's control points are merely temporary destination point used in generating a next straight segment. Alft does not disclose associating a control point with a curve and hold section. Further, Alft nowhere discusses allowing simultaneous manipulation of multiple sections through movement of its control points. Thus, because Alft uses its control points as incremental temporary targets to lead a trajectory across multiple straight-line segments to an actual target and not to create a convenient well bore manipulation application, Alft does not anticipate Applicants' claimed invention.

Conclusion

For all the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account no. 19-0610.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 19-0610.

Respectfully submitted,

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